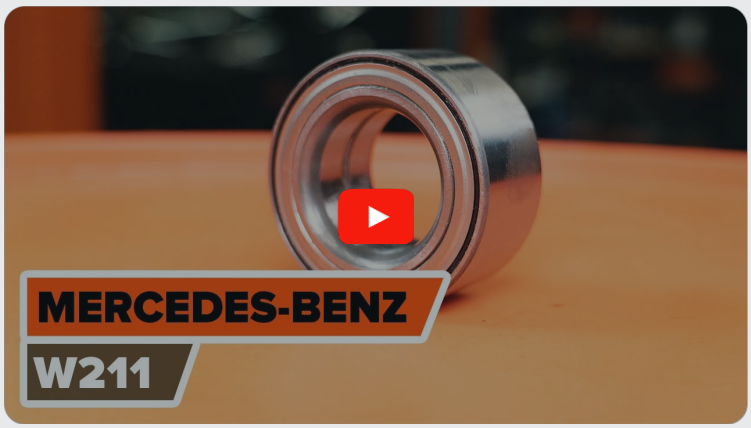
AUTODOC CLUB

How to change front wheel bearing on **MERCEDES-BENZ E-Class Saloon (W212)** – replacement guide

SIMILAR VIDEO TUTORIAL



This video shows the replacement procedure of a similar car part on another vehicle

Important!

This replacement procedure can be used for:
MERCEDES-BENZ E-Class Saloon (W212) E 300 CDI / BlueTEC (212.020, 212.021, 212.027), MERCEDES-BENZ E-Class Saloon (W212) E 350 CDI (212.023), MERCEDES-BENZ E-Class Saloon (W212) E 200 NGT (212.041), MERCEDES-BENZ E-Class Saloon (W212) E 63 AMG (212.074), MERCEDES-BENZ E-Class Saloon (W212) E 300 (212.054), MERCEDES-BENZ E-Class Saloon (W212) E 500 (212.073), MERCEDES-BENZ E-Class Saloon (W212) E 350 (212.059), MERCEDES-BENZ E-Class Saloon (W212) E 300 (212.055), MERCEDES-BENZ E-Class Saloon (W212) E 200 (212.034), MERCEDES-BENZ E-Class Saloon (W212) E 250 CGI (212.047, 212.147), MERCEDES-BENZ E-Class Saloon (W212) E 350 CGI (212.057), MERCEDES-BENZ E-Class Saloon (W212) E 500 (212.072), MERCEDES-BENZ E-Class Saloon (W212) E 220 CDI / BlueTEC (212.001, 212.002), MERCEDES-BENZ E-Class Saloon (W212) E 250 CDI / BlueTEC (212.003, 212.004), MERCEDES-BENZ E-Class Saloon (W212) E 350 BlueTEC (212.024), (+ 15)

The steps may slightly vary depending on the car design.

Please note that this tutorial was created based on the replacement procedure for this car part on a car with a similar design.
This tutorial was created based on the replacement procedure for a similar car part on: MERCEDES-BENZ E-Class Saloon (W211) E 270 CDI (211.016)

REPLACEMENT: WHEEL BEARING – MERCEDES-BENZ E-CLASS SALOON (W212). LIST OF THE TOOLS YOU'LL NEED:

- Wire brush
- Nylon cleaning brush
- WD-40 spray
- Brake cleaner
- All-purpose cleaning spray
- Copper grease
- Multipurpose grease
- Torque wrench
- Combination spanner #17
- Combination spanner #32
- HEX bit No.H5
- Drive socket # 13
- Drive socket # 21
- Torx bit T30
- Wheel impact socket #17
- Ratchet wrench
- Tap wrench
- Impact screwdriver
- Bush and bearing driver set
- Brake caliper wind back tool
- Hammer
- Rubber mallet
- Round-nose pliers
- Crow bar
- 3-Arm Gear Puller
- Wheel chock

Buy tools

Replacement: wheel bearing – MERCEDES-BENZ E-Class Saloon (W212). Tip from AUTODOC experts:

- Do not re-use the bearing assembly of your MERCEDES-BENZ E-Class Saloon (W212) car.
- The wheel hub bearing replacement procedure is identical for both wheels on the same axle.
- Please note: all work on the car – MERCEDES-BENZ E-Class Saloon (W212) – should be done with the engine switched off.

CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

1 Open the bonnet.

2 Connect the service equipment and switch the SBC system to service mode.

Please note!

- Some vehicles may not have the SBC system.

3 Unscrew the brake fluid reservoir cap.

4 Secure the wheels with chocks.

5 Loosen the wheel mounting bolts. Use wheel impact socket #17.

6 Raise the front of the car and secure on supports.

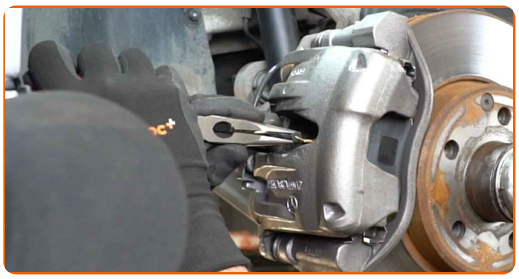
7 Unscrew the wheel bolts.

AUTODOC recommends:

- Important! Hold the wheel while unscrewing the fastening bolts. MERCEDES-BENZ E-Class Saloon (W212)

8 Remove the wheel.

9 Detach the connector of the brake pad wear sensor. Use round-nose pliers.



10 Spread the brake pads. Use a crowbar.

11 Clean the brake caliper fasteners. Use a wire brush. Use WD-40 spray.

12 Unscrew the brake caliper fastening. Use a combination spanner #17. Use a drive socket #13. Use a ratchet wrench.

13 Remove the brake caliper.

Replacement: wheel bearing – MERCEDES-BENZ E-Class Saloon (W212). Tip:

- Tie the caliper to the suspension or to the body with a wire without disconnecting from the brake hose to prevent depressurization of the brake system.
- Make sure that the brake caliper is not hanging on the brake hose.
- Don't press the brake pedal after the brake caliper has been removed. As a result, the piston can fall out from the brake cylinder, and brake fluid leakage and depressurization of the system may occur.
- Check the brake caliper bracket, brake caliper guide pins and boots. Clean them. Replace, if necessary.

14 Treat the brake caliper piston. Use a nylon cleaning brush. Use a brake cleaner.

AUTODOC recommends:

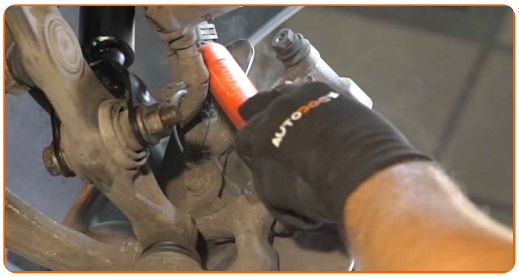
- Replacement: wheel bearing – MERCEDES-BENZ E-Class Saloon (W212). After applying the spray, wait a few minutes.

15 Install the brake caliper wind back tool.

16 Remove the brake pads.

17 Disconnect the brake pads wear sensor.

18 Clean the brake caliper bracket fasteners. Use a wire brush. Use WD-40 spray.



19 Unscrew the caliper bracket fastening. Use a drive socket #21. Use a tap wrench. Use a ratchet wrench.

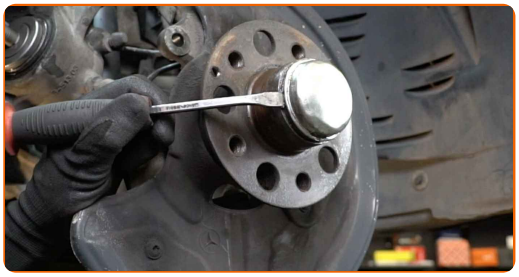
20 Remove the caliper bracket.

21 Clean the brake disc fasteners. Use a wire brush. Use WD-40 spray.

22 Unscrew the brake disc fastening. Use Torx T30. Use an impact screwdriver.

23 Remove the brake disc.

24 Remove the wheel hub nut cap. Use a crowbar. Use a hammer.



Replacement: wheel bearing – MERCEDES-BENZ E-Class Saloon (W212). Tip from AUTODOC experts:

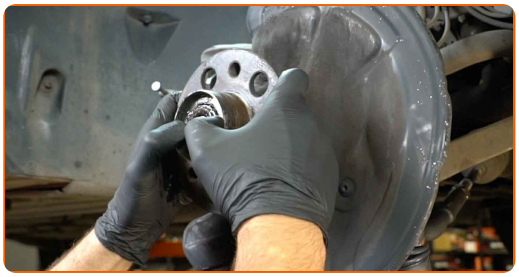
- In some cars, the wheel hub nut is not protected with a cap.

25 Loosen the wheel hub fastening nut screw. Use HEX No.H5. Use a ratchet wrench.

26 Unscrew the hub nut.

27 Remove the fastening nut.

28 Remove the hub and the bearing together, since they are a sealed unit.



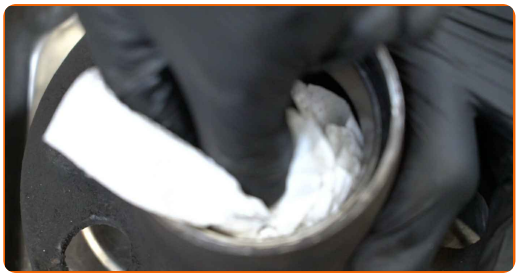
29 Clean the wheel hub mounting seat. Use all-purpose cleaning spray.

30 Remove the wheel hub bearing.

31 Remove the old O-ring. Use a crowbar.

32 Remove the wheel hub bearing.

33 Clean the hub bearing mounting seat.



34 Pull the bearing inner race out of the wheel hub. Use a bush and bearing driver set.

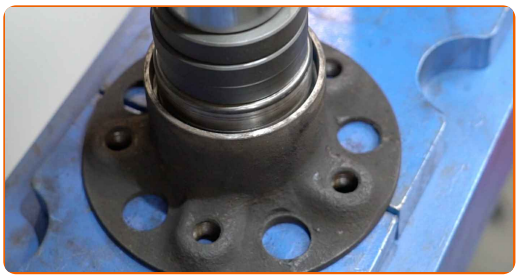
35 Pull the bearing inner race out of the wheel hub. Use 3-Arm Gear Puller. Use a bush and bearing driver set.

36 Clean the hub. Use a wire brush. Use all-purpose cleaning spray.

37 Treat the mounting seat of the bearing assembly. Use a multipurpose grease.

38 Install the inner race of the wheel bearing into the hub. Use a bush and bearing driver set.

39 Install the inner race of the wheel bearing into the hub. Use a bush and bearing driver set.



40 Treat the mounting seat of the bearing assembly. Use a multipurpose grease.

41 Install a new wheel hub bearing.

42 Treat the mounting seat of the bearing assembly. Use a multipurpose grease.

43 Install the new O-ring. Use a bush and bearing driver set.

44 Treat the mounting seat of the bearing assembly. Use a multipurpose grease.

45 Install a new wheel hub bearing.

46 Treat the mounting seat of the bearing assembly. Use a multipurpose grease.

47 Install the new wheel hub together with the bearing.

48 Install the fastening nut.

49 Screw on the hub nut.

50 Install the cap of the hub nut.

51 Clean the hub. Use a wire brush. Treat the contacting surface. Use copper grease.

52 Install the brake disc.

53 Tighten the brake disc fastening. Use Torx T30. Use a torque wrench. Tighten it to 8 Nm torque.

54 Clean the brake caliper bracket from dirt and dust. Use a wire brush. Use a brake cleaner.

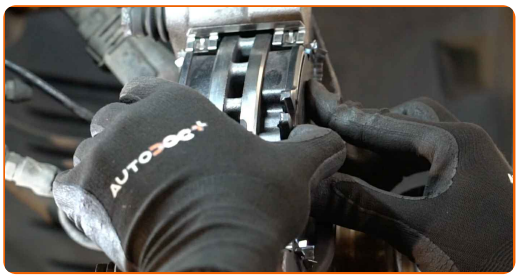
AUTODOC recommends:

- Replacement: wheel bearing – MERCEDES-BENZ E-Class Saloon (W212). After applying the spray, wait a few minutes.

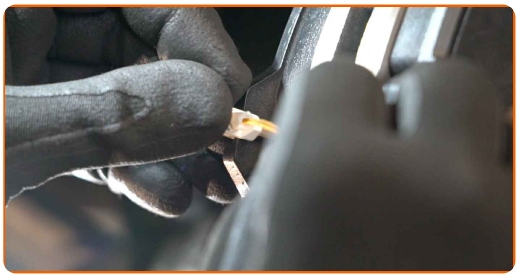
55 Install the brake caliper bracket.

56 Tighten the brake caliper bracket. Use a drive socket #21. Use a torque wrench. Tighten it to 115 Nm torque.

57 Install the brake pads.



58 Connect the brake pads wear sensor.



59 Press in the brake caliper piston. Use brake caliper wind back tool.

60 Install the brake caliper and fix it. Use a combination spanner #17. Use a drive socket #13. Use a torque wrench. Tighten it to 35 Nm torque.

61 Attach the connector of the brake pad wear sensor.

62 Remove the wheel hub nut cap.

63 Install the wheel.

AUTODOC recommends:

- Important! Hold the wheel while screwing in the fastening bolts. MERCEDES-BENZ E-Class Saloon (W212)

64 Screw in the wheel bolts. Use wheel impact socket #17.

65 Adjust the wheel bearing. Use a combination spanner #32.

Replacement: wheel bearing – MERCEDES-BENZ E-Class Saloon (W212). AUTODOC experts recommend:

- Do not apply excessive force when tightening the wheel hub nut. This can damage the tapered roller bearings.

66 Loosen the wheel mounting bolts. Use wheel impact socket #17.

67 Unscrew the wheel bolts.

AUTODOC recommends:

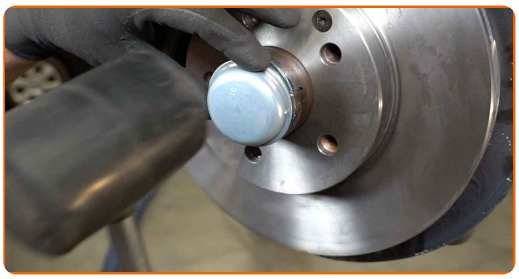
- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts. MERCEDES-BENZ E-Class Saloon (W212)

68 Remove the wheel.

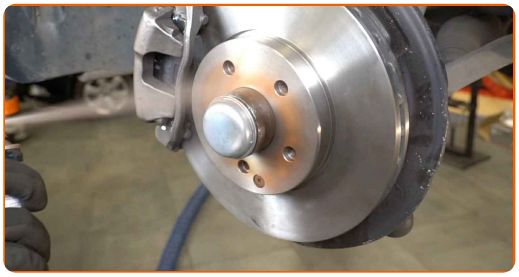
69 Screw in the wheel hub fastening nut screw. Use HEX No.H5. Use a ratchet wrench.

70 Treat the wheel hub bearing. Use a multipurpose grease.

71 Install the cap of the hub nut. Use a rubber mallet.



72 Treat the surface where the brake disc contacts the wheel rim. Use copper grease.

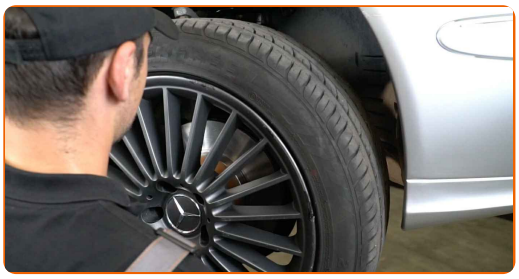


73 Clean the brake disk surface. Use a brake cleaner.

AUTODOC recommends:

- Replacement: wheel bearing – MERCEDES-BENZ E-Class Saloon (W212). After applying the spray, wait a few minutes.

74 Install the wheel.



AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. MERCEDES-BENZ E-Class Saloon (W212)

75 Screw in the wheel bolts. Use wheel impact socket #17.

76 Lower the car and working in a cross order, tighten the wheel bolts. Use wheel impact socket #17. Use a torque wrench. Tighten it to 130 Nm torque.

77 Remove the jacks and chocks.

78 Switch the SBC system to operating mode and disconnect the service equipment.

Replacement: wheel bearing – MERCEDES-BENZ E-Class Saloon (W212). Tip from AUTODOC:

- Check the brake fluid level in the expansion tank and refill if necessary.

79 Tighten the brake fluid reservoir cap.

80 Close the hood.

WELL DONE!

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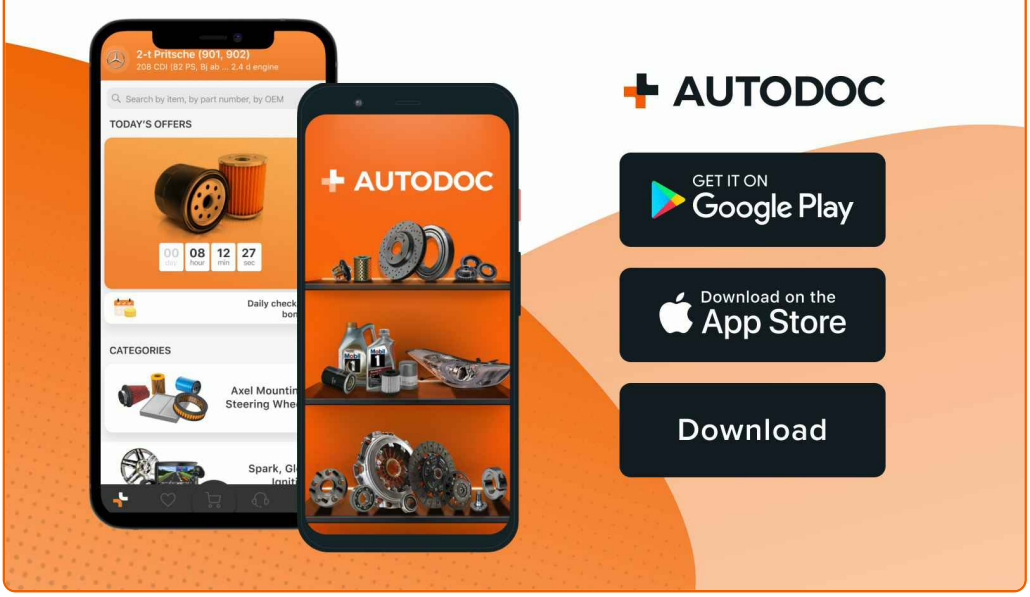

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WHEEL BEARING: A WIDE SELECTION

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